

## **REMARKS**

The Office Action rejects claims 1-14 under 35 U.S.C. 103(a) as unpatentable over Nakamura in view of Tischler '152 (U.S. Pat. No. 5,679,152) and Tischler "App. Phys." (46 App. Phys. Lett. 294). As the Office Action points out, Nakamura does not teach a multilayer buffer as recited in independent claims 1 and 12 of the present application. Applicants have amended independent claims 1 and 12 to distinguish the present invention from the multi-layered buffer described in the Tischler references.

In particular, Tischler '152 teaches the use of a strained layer superlattice having alternating layers for the growth of a GaN substrate material. Tischler (App. Phys.) at p. 294, col. 2, lines 12-21, describes a "superlattice composed of two materials, such that the average lattice constant matches that of GaAs." Tischler '152 discloses use of the same type of alternating A, B layers and specifically references Tischler (App. Phys.) for characterization of such layers. See Tischler '152 at col. 4, lines 37-50.

Thus, in the Tischler '152 patent, the Tischler references taken together require equal and opposite lattice mismatches from the A, B layers, such that the average lattice constant matches that of GaN. Such a condition is specifically excluded in the present invention as now claimed in amended claims 1 and 12. Therefore, the amended claims 1 and 12 distinguish over the cited reference and are believed to be in condition for allowance.

### CONCLUSION

Applicants have explained the differences between the claims as amended and the cited references, and believe the amended claims are now in condition for allowance.

If any further questions should arise prior to a Notice of Allowance, the Examiner is respectfully invited to contact the attorney at the number set forth below.

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Respectfully submitted,

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